

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 59154-A/JPW/GJG/AX	Serial No. 09/768,479
	Applicant Virginia W. Cornish	
	Filing Date January 24, 2001	Group 1614

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

Examiner Initial		Date	Name	Class	Subclass	Filing Date if Appropriate
KK	5 9 2 8 8 6 8	07/27/99	Liu, H. et al.			

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FOREIGN PATENT DOCUMENTS

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		Date	Country	Class	Subclass	Translation	
						Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

KK	Lin, H., et al. Dexamethasone-Methotrexate: An Efficient Chemical Inducer of Protein Dimerization <i>In Vivo</i> . ^{May} 2000. J.Am.Chem.Soc. 122:4247-4248 (Exhibit 2)
	Kopytek, S.J., et al. Chemically Induced Dimerization of Dihydrofolate Reductase by a Homobifunctional Dimer of Methotrexate. ^{April} 2000. Chem Biol 7:313- 321 (Exhibit 3)
	Firestine, S.M., et al. Using an AraC-Based three-hybrid system to detect biocatalysts in vivo. ^{May} 2000. Nature Biotechnology. 18, 544-547 (Exhibit 4)
	Pelletier, J.N., et al. Oligomerization domain-directed reassembly of active dihydrofolate reductase from rationally designed fragments. 1998. Proc.Natl.Acad.Sci.USA. 95, 12141-12146 (Exhibit 5)
	Ladant, D., Karimova, G. Genetic systems for analyzing protein-protein interactions in bacteria. 2000. Res. Microbiol. 151, 711-720 (Exhibit 6)

EXAMINER Kathleen Lee DATE CONSIDERED 12/20/02

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Applicant: Virginia W. Cornish
U. S. Serial No.:09/768,479
Filed: January 24, 2001
Group Art Unit: 1614

Exhibit A

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KK ↓		U.S. Serial No. 10/056,874, filed January 24, 2002 (Exhibit 7)
		U.S. Serial No. 10/084,388, filed February 25, 2002 (Exhibit 8)
		U.S. Serial No. 10/132,039, filed April 24, 2002 (Exhibit 9)

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KL	5 7 3 6 3 4 3	April 7, 1998	Landry			
	5 4 6 8 6 1 4	Nov. 21, 1995	Fields et al.			
	5 3 1 4 8 1 7	May 24, 1994	Schultz, P.			
✓	5 1 9 4 5 9 4	March 16, 1993	Kwawli et al.			

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						Yes	No
KL	9 9 1 0 5 1 0	March 4, 1999	WO				
	9 9 1 0 5 0 8	March 4, 1999	WO				
	9 8 1 3 3 5 3	April 2, 1998	WO				
	9 7 3 1 1 1 3	August 28, 1997	WO				
	9 6 3 0 5 4 0	October 3, 1999	WO				
✓	0 7 4 2 0 1 5	November 13, 1996	EP				

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KL	Austin DJ, et al. Proximity versus allostery: the role of regulated protein dimerization in biology. 1994. Chem Biol.
	1(3): 131-6 (Exhibit 11)
	Belshaw PJ, et al. Controlling protein association and subcellular localization with a synthetic ligand that induces heterodimerization of proteins. 1996. Proc. Natl Acad Sci USA
	93(10):4604-7 (Exhibit 12)
✓	Belshaw PJ, et al. Controlling programmed cell death with a cyclophilin-cyclosporin-based chemical inducer of dimerization. 1996. Chem. Biol.
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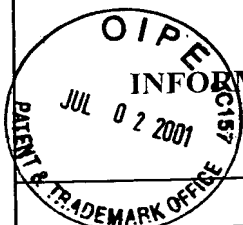
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KK ↓	Choi J, et al. Structure of the FKBP-12-Rapamycin complex interacting with the binding domain of human FRAP. 1996. Science
	273(5272):239-42 (Exhibit 14)
	DeGrado WF, et al. Screening, selection and design: standing at the crossroads in three dimensions. 1997. Current Opinion in Structural Biology
	7:455-456 (Exhibit 15)
	Diver SR, et al. Single-step synthesis of cell-permeable protein dimerizers that activate signal transduction and gene expression. 1997. J. Am. Chem. Soc.
	119: 5106-5109 (Exhibit 16)

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KK	Ho SN, et al. Dimeric ligands define a role for transcriptional activation domains in reinitiation. 1996. Nature. 382(6594):822-6 (Exhibit 17)
	Holsinger LJ, et al. Signal transduction in T lymphocytes using a conditional allele of Sos. 1995. Proc. Natl. Acad. Sci. USA 92:9810-9814 (Exhibit 18)
✓	Hung DT, et al. Understanding and controlling the cell cycle with natural products. 1996. Chem. Biol. 3:623-639 (Exhibit 19)

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KK	Klemm JD, et al. Dimerization as a regulatory mechanism in signal transduction. 1998. Annu. Rev. Immunol.
	16:569-92 (Exhibit 20)
↓	Liberles SD, et al. Inducible gene expression and protein translocation using nontoxic ligands identified by a mammalian three-hybrid screen. 1997. Proc. Natl. Acad. Sci. USA
	94(15):7825-7830 (Exhibit 21)
↓	Licitra EJ, et al. A three-hybrid system for detecting small ligand-protein receptor interactions. 1996. Proc. Natl. Acad. Sci. USA
	98:12817-12821 (Exhibit 22)

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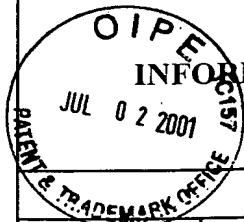
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	95:10523-10528 (Exhibit 23)
	Pruschy MN, et al. Mechanistic studies of a signaling pathway activated by the organic dimerizer FK1012. 1994. Chem. Biol.
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	Schreiber SL. Chemical genetics resulting from a passion for synthetic organic chemistry. 1998. Bioorganic & Medicinal Chemistry
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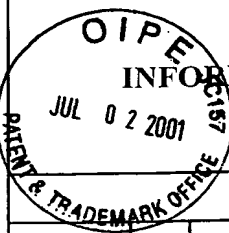


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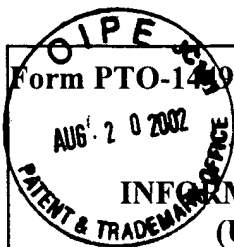
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<div style="font-size: 2em;">KK</div> <div style="font-size: 4em; margin-top: 20px;">↓</div>	Spencer DM , et al. Controlling signal transduction with synthetic ligands. 1993. Science 262(5136):1019-1024 (Exhibit 26)— Spencer DM, et al. Functional analysis of Fas signaling in vivo using synthetic inducers of dimerization. 1996. Curr Biol. 6(7):839-47 (Exhibit 27) Spencer DM, et al. A general strategy for producing conditional alleles of Src-like tyrosine kinases. 1995. Proc. Natl. Acad. Sci. 92:9805-9809 (Exhibit 28)

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	Stockwell BR, et al. TGF-beta-signaling with small molecule FKBP12 antagonists that bind myristoylated FKBP12- TGF-beta type 1 receptor fusion proteins. 1998. Chem Biol.						
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	Stockwell BR, et al. Probing the role of homomeric and heteromeric receptor interactions in TGF-beta signaling using small molecule dimerizers. 1998. Curr Biol						
	8(13):761- 70 (Exhibit 30)						
	Winkler T., et al. Confocal fluorescence coincidence analysis: An approach to ultra high-throughput screening. 1998 Proc. Natl. Acad. Sci. USA 96:1375-1378 (Exhibit 31)						
	Yang, J., et al. Small-molecule control of insulin and PDGF receptor signaling and the role of membrane attachment. 1997 Curr. Biol. 8:11-18 (Exhibit 32)						
	Zlokarnik G, et al. Quantitation of transcription and clonal selection of single living cells with beta-lactamase as reporter. 1998, Science 279(5347):84-8 (Exhibit 33)						
	Search Report dated May 14, 2001 corresponding PCT International Application No. PCT/US01/02285 (Exhibit 34)						
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KK		6	2	0	0	7	5	9		March 13, 2001	Dove, S., et al.			
KK		5	9	2	5	5	2	3		July 20, 1999	Dove, S., et al.			

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